



# **TEST REPORT**

TUV India Pvt. Ltd.

Anjani Palladium, 203 & 204, Second Floor And Mezzanine Floor,

104b, Survey No.126/1, Baner Main Road, Baner, Pune 411045, Maharashtra, India.

Tel No: +(91) 20-67113113 Website: <u>www.tuv-nord.com</u>

Report No: TUV/PTL/20-21/REL/0034

Date of issue: 22.04.2021

ULR NO: TC523721000000029F

1. Job Card No.

TUV/20-21/REL/0036

2. Job Order No.

8118824753

3. Sample ID

TUV/PU210306-001

4. Service Requested by

M/s. ENERTECH UPS PVT. LIMITED

S. No. 399/1-2, BHAREGAON, P.O. GHOTWADE,

**DIST-PUNE 412 115** 

5. Report Issued to

M/s. ENERTECH UPS PVT. LIMITED

S. No. 399/1-2, BHAREGAON, P.O. GHOTWADE,

**DIST-PUNE 412 115** 

Sneha Mandye
(Jr. Officer)

Date: 22.04.2021





Date: 22/04/2021

**TUV India Private Limited** 

Anjani Palladium, 203 & 204, Second Floor And Mezzanine Floor, 104B, Survey No.126/1, Baner Main Road, Baner, Pune 411045,

Maharashtra, India

CIN U74140MH1989PTC052930

Tel. : 020 6647 7000

Toll Free: 1800-209-0902 Email: pune@tuv-nord.com

Website: www.tuv-nord.com/in

**TEST REPORT** 

Test Report No.: TUV/PTL/2	20-2	1/REL/0034	Page 1 of 6	
			Issue date 22/04/2021	
Test item	:	Solar PCU (Sunmagic)		
Model Number	:	-		
Sample ID	:	TUV/PU210306-001	202102672	
Condition of sample on receipt	:	Good Date of rec	eipt: 06/03/2021	
Testing laboratory and its address	:	TUV India Private Limited  ANJANI PALLADIUM, 203 & 204, Second Floor and  Mezzanine Floor, 104B, Survey No. 126/1, Baner Main Road, Baner,  Pune - 411 045, Maharashtra.		
Test specification	:	IEC 60068-2-1: Tests- Test Ae & Ad: Cold (Operating and non-operating condition) IEC 60068-2-2: Tests- Test Be & Bd: Dry Heat (Operating and non-operating condition) IEC 60068-2-14: Tests- Test Na: Change of temperature IEC 60068-2-30: Tests-Test Db: Damp heat, cyclic (12+12h cycle)		
Test Result	:			
Other Aspects	:			
Declaration of Conformity	:			
Testing Start Date: 11/03/20	21	Testing End Date: 16/03/2021		
Tested by:		Approved by / Authorized Signatory:	Issued by:	
Qualute		TUV TUV	John.	
Pravin Lute (Test Engineer)	Rupesh Dhule Sneha Mandve (Sr. Test Engineer) (Jr. officer)			

Date: 22/04/2021

Date: 22/04/2021





Report No.:- TUV/PTL/20-21/REL/0034 Dated: 22/04/2021

GROUP: Environmental Test Facility DISCIPLINE: Electronics

DISCIPLINE: Electronics				
Test	item description	:	Solar PCU (Sunmagic)	
Trade Mark :		:	ENERTECH	
Ratings : 5 kW / 5 kVA, Battery DC: 48 Vd.c., AC Input: 170 – 270 PV range: 65 – 160 Vd.c., Output: 230 Va.c.		5 kW / 5 kVA, Battery DC: 48 Vd.c., AC Input: 170 – 270 Va.c., PV range: 65 – 160 Vd.c., Output: 230 Va.c.		
Name	e of Manufacture	:	M/s. ENERTECH UPS PVT. LIMITED	
Address of Manufacturer :		:	S. No. 399/1-2, BHAREGAON, P.Ó. GHOTWADE, DIST-PUNE 412 115	
Photographs			See Attachment 1	
Testing procedure and testing location:			:	
	Testing Laboratory	:	TUV India Private Limited	
Testing location/ address : ANJANI PALLADIUM, 203 & 204, Second Floor and Mezzanine Floor, 104B, Survey No. 126/1, Baner Ma Baner, Pune - 411045, Maharashtra.		Mezzanine Floor, 104B, Survey No. 126/1, Baner Main Road,		
Teste	d by (name + signature)	:	Mr. Pravin Lute (Test Engineer)	
		:	Mr. Rupesh Dhule (Sr. Test Engineer )	





Report No.:- TUV/PTL/20-21/REL/0034

Dated: 22/04/2021

### **Environmental Condition:**

Envi	ronmental/ Ambient Condition		
1	Temperature	25.2°C	
2	Humidity	46%	

## **Equipment Used:**

Test equipment list				
Item	Туре	Make / Model	Equipment No. / SI. No.	Calibration date Due
1	Climatic Test Chamber	Weiss Technik / C-1500-40	TUV/PTL/SAFTY/301	24/7/2021
2	Anemometer	Fluke 925	TUV/PTL/SAFTY/347	29/7/2021





Report No.:- TUV/PTL/20-21/REL/0034

Dated: 22/04/2021

# Test Requirement:

Sr. No	Test Type	Test Method	Standard	Test Specification	Test Duration
1	Cold Test	Cold Test	IEC 60068-2- 1:2007 (Test Ab)	Ambient To -10°C within 35min. Temperature change rate: 1.0°C/min10°C Stable for 3 hrs -10°C to Ambient 35 min Stability period at ambient 1 Hr No of cycle: 1 EUT Condition: OFF	5 hrs 10 min
2	Dry Heat test	Dry Heat	IEC 60068-2- 2:2007 (Test Bd)	Ambient To +55°C within 30min Temperature change rate:-1.0°C/min +55°C Stable for 17hrs +55° to Ambient within 30 min Stability period at ambient 1 Hr No. of cycle: 1 EUT Condition: OFF	19hrs
3	Change of Temperature Test	Thermal Cyclic Test	IEC 60068-2- 14:2009 (Test Na)	Ambient stable for 3 min Ambient to -10°C within 18 min -10°C Stable for 3 hrs -10 to ambient immediately Ambient to +55°C within 18 min +55°C Stable for 3 hrs +55°C to Ambient immediately Ambient stable for 3 min Stability period at ambient 1 Hr EUT Condition: OFF No. of Cycle:3	21 hrs
4	Damp Heat Test	Damp Heat	IEC 60068-2- 30:2005 (Test Db)	Lower Temperature: 25 ±3°C Humidity not less than 96%RH Higher Temperature 55°C±3°C Humidity not less than 93%RH Temperature change rate:-0.18°C/min Stability period at ambient 1 Hr Exposure period: 72 Hr EUT Condition: OFF NO of Cycle:-3	73 hrs





Report No.:- TUV/PTL/20-21/REL/0034

Dated: 22/04/2021

### Functional test:

Before test	After Test
EUT output is ON after pressing ON/OFF button	EUT output is ON after pressing ON/OFF button
Display ON after powered ON	Display ON after powered ON
Measure voltage at output is 230 V	Measure voltage at output is 230 V





Report No.:- TUV/PTL/20-21/REL/0034

Dated: 22/04/2021

## Attachment 1:

Photographs: Equipment under Test



Fig.1 Front view



Fig.2: Rear View of EUT

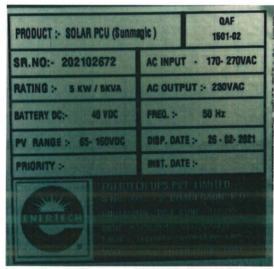


Fig.3: Marking Plate Photograph

\*\*\*End of Report\*\*\*